

CLAIMS

What is claimed is:

1. A spacecraft radiator system for use on a spacecraft having a body and a plurality of solar arrays, the system comprising:
 - first and second opposite facing payload radiators;
 - first and second opposite facing deployable radiators; and
 - 5 one or more coupling heat pipes that cross couple opposite facing payload and deployable radiators.
2. The spacecraft radiator system recited in Claim 1 wherein the one or more coupling heat pipes comprise loop heat pipes.
3. A spacecraft comprising:
 - a body;
 - a plurality of solar arrays;
 - a spacecraft radiator system comprising:
 - 5 first and second opposite facing payload radiators;
 - first and second opposite facing deployable radiators; and
 - one or more coupling heat pipes that cross couple opposite facing payload and deployable radiators.
4. The spacecraft recited in Claim 3 wherein the one or more coupling heat pipes comprise loop heat pipes.
5. A spacecraft heat dissipation method comprising the steps of:
 - configuring a spacecraft to have a body, a plurality of solar arrays, first and second opposite facing payload radiators, first and second opposite facing deployable radiators, and loop heat pipes cross coupling opposite facing payload and deployable radiators;
 - 5 launching the spacecraft into orbit; and
 - when in orbit, cross coupling heat coupled to the respective payload radiators to the opposite facing deployable radiator.

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